

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A method of making a substantially transparent catheter shaft, comprising:
 - a) passing melted polymeric material through at least one filtration screen to filter the polymeric material;
 - b) extruding the filtered molten polymeric material through a die of an extruder to form extruded tubing;
 - c) maintaining a temperature at an exit of the extruder no greater than from about 5% to about 15% above a melting point of the polymeric material; and
 - d) introducing the extruded tubing into a quench bath containing a quench medium, and contacting the extruded tubing with the quench medium, and so that the polymeric material forming the extruded tubing is in an amorphous state.
2. (original) The method of Claim 1 wherein step a comprises passing the melted polymeric material through at least two filtration screens having a mesh size of from about 10 μm to about 30 μm .
3. (original) The method of Claim 1 including maintaining the extruded tubing between the extruder exit and the quench bath for about 0.01 sec to about 0.10 sec after exiting the extruder and before contacting the quench medium.

4. (original) The method of Claim 1 wherein the polymeric material is a polyetheretherketone polymeric material, and including melt processing the polyetheretherketone polymeric material at a temperature of from about 720° F to about 730° F.

5. (original) The method of Claim 1 including minimizing the formation of water marks on the tubing by providing a quench medium which does not boil upon introduction of the tubing therein.

C 6. (original) The method of Claim 1 including providing a quench medium comprising propylene glycol.

7. (original) The method of Claim 1 including providing an aqueous quench medium, and chilling the aqueous quench medium to about 4° C.

8. (previously presented) An intraluminal catheter, comprising a catheter shaft having a proximal end, a distal end, at least a section formed of an extruded polymeric tubular member of polyetheretherketone polymeric material that is substantially transparent and substantially free of water marks and gels so that the substantially transparent tubular member has a percent transmittance of visible light of about 50% to about 100%, and a nontransparent section which is located distal to the substantially transparent shaft section and which is in communication with the substantially transparent shaft section.

9. (original) The intraluminal catheter of Claim 8 wherein the transparent shaft section has a wall thickness of about 0.05 mm to about 0.13 mm.

10. (previously presented) The intraluminal catheter of Claim 8 wherein the polyetheretherketone polymeric material of the transparent shaft section is amorphous.

11. (canceled)

12. (original) The intraluminal catheter of Claim 8 wherein the transparent shaft section has a crystallinity of not greater than about 20%.

13. (previously presented) An intraluminal balloon catheter, comprising;

a) an elongated catheter shaft having a proximal end, a distal end, an inflation lumen, a substantially transparent proximal shaft section formed of an extruded polymeric material, and a nontransparent distal shaft section in communication with the substantially transparent proximal shaft section; and

b) an inflatable member on the distal section of the shaft, having a proximal end located distal to a distal end of the substantially transparent proximal shaft section, a distal end, and an interior in fluid communication with the inflation lumen.

14. (previously presented) The intraluminal catheter of Claim 13, wherein the substantially transparent shaft section is formed of a polymeric material selected from the group consisting of polyphenylene sulfide, polyether sulfone, and polyetheretherketone.

15. (original) The intraluminal catheter of Claim 13, wherein the elongated shaft includes:

a) an outer tubular member having a proximal section and a distal section, the proximal section having at least a portion thereof being substantially transparent and formed of a polyetheretherketone polymeric material; and

b) an inner tubular member having a proximal section, a distal section, and a lumen, and being disposed within the outer tubular member and defining therewith the inflation lumen, so that a portion of the inner tubular member disposed within the outer tubular member transparent portion is visible through the outer tubular member.

16. (original) The intraluminal catheter of Claim 15 wherein the outer tubular member has a wall thickness of about 0.05 mm to about 0.13 mm.

17. (original) The intraluminal catheter of Claim 15 wherein the outer tubular member has an outer diameter of about 0.7 mm to about 1.3 mm.

18. (original) The intraluminal catheter of Claim 15 wherein the outer tubular member has an inner diameter of about 0.4 mm to about 1.2 mm.

19. (original) The intraluminal catheter of Claim 15 wherein the outer tubular member comprises a substantially transparent proximal shaft section formed of amorphous polyetheretherketone and a distal shaft section formed of a different polymeric material.

20. (original) The intraluminal catheter of Claim 19 wherein the amorphous transparent shaft section has a crystallinity of not greater than about 20%.

21. (original) The intraluminal catheter of Claim 19 wherein the amorphous transparent shaft section has a percent transmittance of visible light of from about 50% to about 100%.

22. (previously presented) A balloon catheter, comprising;

a) an elongated catheter shaft having a proximal end, a distal end, an outer tubular member defining an inflation lumen, and an inner tubular member disposed within at least a section of the inflation lumen and defining a guidewire lumen, the outer tubular member having at least a section which is substantially transparent and which is formed of an extruded polymeric material selected from the group consisting of polyphenylene sulfide, polyether sulfone, and polyetheretherketone; and

b) a balloon on the shaft, having a proximal end, a distal end, and an interior in fluid communication with the inflation lumen.

23. (previously presented) The balloon catheter of claim 22 wherein the substantially transparent section of the outer tubular member is in fluid communication with a nontransparent section of the outer tubular member located distal to the substantially transparent section.

24. (previously presented) The balloon catheter of claim 23 wherein the balloon proximal end is located distal to a distal end of the substantially transparent section of the outer tubular member.

25. (previously presented) The balloon catheter of claim 23 wherein the nontransparent section of the outer tubular member is formed of a different polymeric material than the substantially transparent section of the outer tubular member.

26. (previously presented) The balloon catheter of claim 22 wherein the extruded polymeric material of the substantially transparent section of the outer tubular member is polyetheretherketone.